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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/104,123	06/24/1998	ROBERTO J. RIOJA	97-2301	3884

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[REDACTED] EXAMINER

IP, SIKYIN

[REDACTED] ART UNIT

[REDACTED] PAPER NUMBER

1742

DATE MAILED: 05/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Offic Action Summary

Application No.	09/104,123	Applicant(s)	<i>J</i> RIOJA ET AL.
Examiner	Sikyin Ip	Art Unit	1742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 14 February 2003.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-8, 16-22 and 26-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-8, 16-22, and 26-37 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____	6) <input type="checkbox"/> Other: _____

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321© may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-8, 12, 16-22, and 26-37 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-100 of copending Application No. 09/591,904. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed Al based alloy composition is overlapped by said copending Application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-8, 12, 16-22, and 26-37 are rejected under 35 U.S.C. § 103 as being unpatentable over USP 5122339 to Pickens et al (PTO-1449, claim 1), USP 5211910 to Pickens et al (PTO-1449, abstract), USP 5259897 to Pickens et al (PTO-1449, abstract), WO 9532074 (abstract), WO 9212269 (abstract), or DE 2810932 (abstract). References are applied individually under 35 U.S.C. § 103.

6. The cited references disclose the features substantially as claimed. The disclosed features include the claimed Al base alloy. The difference between the reference(s) and the claims are as follows: the cited references do not teach to avoid formation of an Al_3Li phase or function of the Li ions to form clusters of atoms of solute. The cited references may not explicitly disclose the claimed fracture toughness. However, the instant alloy composition and tensile strength are overlapped by the cited references; consequently, the properties as recited in the

instant claims would have inherently possessed by the teachings of the cited references. Therefore, the burden is on the applicant to prove that the product of the prior art does not necessarily or inherently possess characteristics attributed to the claimed product. *In re Spade*, 911 F.2d 705, 708, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990) and *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). An obviousness rejection based on similarity in chemical structure and function entails the motivation of one skilled in the art to make a claimed compound, in the expectation that compounds similar in structure will have similar properties. *In re Gyurik*, 596 F.2d 1012, 1018, 201 USPQ 552, 557 (CCPA 1979); See *In re May*, 574 F.2d 1082, 1094, 197 USPQ 601, 611 (CCPA 1978) and *In re Hoch*, 57 CCPA 1292, 1296, 428 F.2d 1341, 1344, 166 USPQ 406, 409 (1970). Because of the close structural similarity between the claimed compounds at issue here and the compounds of cited reference and because those prior art compounds possess claimed activity, it is concluded that the required motivation is present here. See *In re Wood*, 582 F.2d 638, 641, 199 USPQ 137, 139 (CCPA 1978). When prior art compounds essentially "bracketing" the claimed compounds in structural similarity are all known, one of ordinary skill in the art would clearly be motivated to make those claimed compounds in searching for new products. Therefore, the subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the

invention was made to have selected the overlapping portion of the subject matter disclosed by the reference. Overlapping ranges have been held to be a *prima facie* case of obviousness. See *In re Malagari*, 499 F.2d 1297, 1303, 182 USPQ 549, 553 (CCPA 1974).

Response to Arguments

7. Applicant's arguments filed February 14, 2003 have been fully considered but they are not persuasive.

8. Applicants argue that the claimed composition possesses unexpected results. However, the unexpected results have not been shown in the instant specification because it fails to compare to closet art. *In re Burckel*, 201 USPQ 67 and MPEP § 716. Comparison must be done under identical condition except for the novel features of the invention. *In re Brown*, 173 USPQ 685 and *In re Chapman*, 148 USPQ 711. The showing of unexpected results must be occurred over the entire claimed range. *In re Clemens*, 622 F.2d 1029, 206 USPQ 289, 296 (CCPA 1980). The scope of the showing must be commensurate with the scope of the claims. *In re Tiffin*, 448 F.2d 791, 792 (Fed. Cir. 1971), *In re Coleman*, 205 USPQ 1172, *In re Grasselli*, 713 F.2d 731, 743, 218 USPQ 769, 778 (Fed. Cir. 1983), and *In re Greenfield*, 197 USPQ 227.

9. Applicants argue that the examples of cited references have much higher Li content than claimed. But, the examples of the cited reference are given by way of illustration and not by way of limitation. *In re Boe*, 148 USPQ 507 (CCPA 1966) and *In re Snow*, 176 USPQ

328. Furthermore, applicants have not substantiated their position that the claimed Li range is critical.

10. Applicants argue that cited references fail to disclose the function of the Li ion. But, applicants have not substantiated their position that said Li function would not have been inherently possessed by alloys of cited references. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977).

11. Applicants' argument as set forth in page 6, first full paragraph of the instant remarks is noted. But, the instant claimed 0.99 wt.% Li is about 1.0 wt.% Li as taught by USP '339. Furthermore, applicants do not provide evidence that the claimed Li content is critical.

12. Applicants' argument as set forth in page 6, second full paragraph of the instant remarks is noted. But applicants have not shown the alloys of USP '339 would not have the same microstructures. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977).

13. Applicants argue that the cited references fail to disclose the claimed fracture toughness. But, the instant tensile strengths, alloy composition, and conventional heat treatment methods are overlapped by the cited references (for example, see USP '339 - Tables and Figures). Therefore, the claimed fracture toughness would have been inherently possessed by alloys of cited references.

14. Applicants argue that the alloy of USP '339 contains Ag. But, the instant recited phrase "substantially free of Ag" is interpreted in view of page 5, lines 23-25 of the instant specification which discloses Ag could be up to 2 wt.%.

15. Applicants argue that USP '910 teaches away from the claimed microstructure by forming (Al₂CuLi). But, the instant claims do not exclude the Al₂CuLi and applicants do not provide evidence that the claimed microstructure would not be formed in the alloy of USP '910 and other cited references of record.

16. Applicants argue that the USP '910 does not disclose the claimed fracture toughness. The examiner reiterates the response set forth in item 13 above. (See also Table VI and VII of USP '910 for the tensile strengths).

17. Applicants argue that UPS '910 teaches peak strength at about 1.1 wt.% Li which is outside the claimed range 0.99 wt.% Li. But 0.99 wt.% is about 1.1 wt.%. Further, applicants have not substantiated 0.99 wt.% Li is critical.

18. Applicants' argument with respect to Ag, Zn, and Sc elements is noted. But, the examiner reiterates the response as set forth in item 14 above.

19. Applicants' argument with respect to USP '897, WO 9532074, WO 9212269, and DE 2810932 is noted. But, the examiner reiterates the responses as set forth above.

20. Applicants argue that the Cu range of DE '932 is so broad. But, applicants do not provide evidence of the claimed Cu content is critical.

Conclusion

21. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

The above rejection relies on the reference(s) for all the teachings expressed in the text(s) of the references and/or one of ordinary skill in the metallurgical art would have reasonably understood or implied from the text(s) of the reference(s). To emphasize certain aspect(s) of the prior art, only specific portion(s) of the text(s) have been pointed out. Each reference as a whole should be reviewed in responding to the rejection, since other sections of the same reference and/or various combination of the cited references may be relied on in future rejection(s) in view of amendment(s).

All recited limitations in the instant claims have been met by the rejections as set forth above.

Applicant is reminded that when amendment and/or revision is required, applicant should therefore specifically point out the support for any amendments made to the disclosure. See MPEP § 2163.06 (a) and 37 C.F.R. § 1.119.

Examiner Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to S. Ip whose telephone number is (703) 308-2542. The examiner can normally be reached on Monday to Friday from 5:30 A.M. to 2:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Roy V. King, can be reached on (703)-308-1146.

The facsimile phone numbers are (703) 872-9310 (non-final Official Paper only), (703) 872-9311 (after-final Official Paper only), and (703) 305-7719 (Unofficial Paper only). When filing a FAX in Technology Center 1700, please indicate in the Header (upper right) "Official" for papers that are to be entered into the file, and "Unofficial" for draft documents and other communication with the PTO that are not for entry into the file of the application. This will expedite processing of your papers.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0651.


SIKYIN IP
PRIMARY EXAMINER
ART UNIT 1742

Serial No: 09/104,123
Art Unit: 1742

-9-

S. Ip
May 5, 2003